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TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Palanahalli)
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

SIEVE ANALYSIS

Total Weight:	**3000** gms				
Type of Material	**Fine aggregate (River Sand/M sand)**		**Proposed Use**	P.C.C	
Sample Location	At Plant/site		**Date of Sampling**	02-03-2019	
			Date of Testing	02-03-2019	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing (Zone-II)**
10.00 mm	0	0	0	100.00	**100**
4.75 mm	241	241	8.03	91.97	**90 - 100**
2.36 mm	283	524	17.47	82.53	**75 - 100**
1.18 mm	522	1046	34.87	65.13	**55 - 90**
0.600 mm	481	1527	50.90	49.10	**35 -59**
0.300 mm	622	2149	71.63	28.37	**8-30**
0.150 mm	610	2759	91.97	8.03	**0 - 10**
Pan	241	3000			**-**

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike				
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)				
Total Weight:	10000	gms			

SIEVE ANALYSIS

Type of Material	20 mm down size		Proposed Use	Concrete	
Sample Location	At Plant		Date of Sampling	07-03-2019	
			Date of Testing	07-03-2019	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	274	274	2.74	97.26	95 - 100
10.00 mm	4652	4926	49.26	50.74	25 - 55
4.75 mm	4560	9486	94.86	5.14	0 - 10
Pan	514	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

29/06

Consultant's Representative

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TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	07-03-2019	
			Date of Testing	07-03-2019	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	264	264	2.64	97.36	**95 - 100**
10.00 mm	4988	5252	52.52	47.48	**25 - 55**
4.75 mm	4325	9577	95.77	4.23	**0 - 10**
Pan	423	10000			
Remarks :	✓ Satisfactory / Not Satisfactory				

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike				
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)				
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore				
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	20 mm down size		**Proposed Use**	Concrete	
Sample Location	At Plant		**Date of Sampling**	07-03-2019	
			Date of Testing	07-03-2019	
IS Sieve Size	**Weight Retained**	**Cum. Weight Retained**	**Cum. % Retained**	**Cum. % Passing**	**Spec. Limit (%) Passing**
40.00 mm	0	0	0	100	**100**
20.00 mm	280	280	2.80	97.20	**95 - 100**
10.00 mm	4700	4980	49.80	50.20	**25 - 55**
4.75 mm	4800	9780	97.80	2.20	**0 - 10**
Pan	220	10000			
Remarks :	✓ Satisfactory / Not Satisfactory				

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	Concrete	
Sample Location	Plant		Date of Sampling	07-03-2019	
			Date of Testing	07-03-2019	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	578	578	5.78	94.22	90-100
10.0	3340	3918	39.18	60.82	40-85
4.75	5420	9338	93.38	6.62	0-10
Pan	662	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	Concrete	
Sample Location	Plant		Date of Sampling	07-03-2019	
			Date of Testing	07-03-2019	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	585	585	5.85	94.15	90-100
10.0	3363	3948	39.48	60.52	40-85
4.75	5498	9446	94.46	5.54	0-10
Pan	554	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

SPECIFIC GRAVITY AND WATER ABSORPTION
FINE AGGREGATE (IS-2386-PART-3)

Type of Material	**Sand/M sand**	**Proposed Use**	Concrete
Location/Source	**At Plant/site**	**Date of Sampling**	08-03-2019
Period of Soaking	**24 hours**	**Date of Testing**	08-03-2019

Sl. No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.		663	665	669	
B	Weight of oven - dry sample gm.		656	653	661	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1693	1691	1692	
E	Bulk specific gravity	B / (C + A - D)	2.678	2.622	2.623	**2.641**
G	Absorption (%)	(A - B) *100 / B	1.067	1.838	1.210	**1.372**

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TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

SIEVE ANALYSIS

Total Weight:	3000 gms				
Type of Materia	Fine aggregate (River Sand/M sand)		Proposed Use	Concrete	
Sample Location	At Plant/site		Date of Sampling	08-03-2019	
			Date of Testing	08-03-2019	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	238	238	7.93	92.07	90 - 100
2.36 mm	280	518	17.27	82.73	75 - 100
1.18 mm	521	1039	34.63	65.37	55 - 90
0.600 mm	554	1593	53.10	46.90	35 -59
0.300 mm	678	2271	75.70	24.30	8-30
0.150 mm	512	2783	92.77	7.23	0 - 10
Pan	217	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT	
Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

SPECIFIC GRAVITY AND WATER ABSORPTION
FINE AGGREGATE (IS-2386-PART-3)

Type of Material	**Sand/M sand**	**Proposed Use**	Concrete
Location/Source	**At Plant/site**	**Date of Sampling**	08-03-2019
Period of Soaking	**24 hours**	**Date of Testing**	08-03-2019

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	Average
A	Weight of sturated surface dry sample gm.	630	653	676	
B	Weight of oven - dry sample gm.	622	645	668	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1673	1688	1698	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.681	2.688	2.640	**2.670**
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.286	1.240	1.198	**1.241**

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TEST REPORT	
Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

SIEVE ANALYSIS

Total Weight:	3000	gms			
Type of Materia	Fine aggregate (River Sand/M sand)		Proposed Use	Concrete	
Sample Location	At Plant/site		Date of Sampling	08-03-2019	
			Date of Testing	08-03-2019	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	238	238	7.93	92.07	90 - 100
2.36 mm	276	514	17.13	82.87	75 - 100
1.18 mm	412	926	30.87	69.13	55 - 90
0.600 mm	570	1496	49.87	50.13	35 -59
0.300 mm	749	2245	74.83	25.17	8-30
0.150 mm	530	2775	92.50	7.50	0 - 10
Pan	225	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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Test Report on Cement

Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)
Sample ID	Cement
Date of Sample Tested	08-03-2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	36 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	388	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	5mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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Test Report on Cement

Project	Construction of Govt. School Rooms, Palanahalli and Kattigehalli Village in Ward No.05 (Kattigehalli)
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)
Sample ID	Cement
Date of Sample Tested	08-03-2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	38 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	380	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	6mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	

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Name of Work	:	Improvements to Roads and Drains Thirumenahalli And Surrounding Area in Ward no 5.
Client	:	Bruhat Bengaluru Mahanagara Palike
Consultant	:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	:	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)
Date of Testing	:	13-03-2019
Type of Mix	:	WMM
Sample I/D	:	WMM 1

GRADATION FOR WMM
(As per MORT&H 400-11)

Sample Location:	At plant	Date of Sampling:	13-03-2019
		Date of testing:	13-03-2019
Type of material & Purpose:	WMM	Oven Dry Wt.(gms):	10000.0

IS Sieve size in mm	Weight retained	Cummulative weight retained (gm)	Cummulative % of retained	Cummulative % of passing	Specification limits
53	0	0	0.00	100.00	100.00
45	352	352	3.52	96.48	95-100
22.4	2605	2957	29.57	70.43	60-80
11.2	2515	5472	54.72	45.28	40-60
4.75	1521.0	6993	69.93	30.07	25-40
2.36	945.0	7938	79.38	20.62	15-30
0.6	714.0	8652	86.52	13.48	8.0-22.0
0.075	675.0	9327	93.27	6.73	0-8
Pan	673.0	10000			
Total	10000.0				

29/06

Consultant's Representative

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Project	Improvements to Roads and Drains Thirumenahalli And Surrounding Area in Ward no 5.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

AGGREGATE IMPACT VALUE
(IS: 2386 Part - 4)

Proposed Use	WMM	Date of Sampling	13-03-2019
Sample Location	At plant	Date of Testing	13-03-2019

Sl. No.	Description		Test No. 1	Test No. 2	Test No. 3	Spec Limit (%)
1	Wt. of stone pieces (dry) passing IS Sieve 12.5mm but retained in IS sieve 10mm (gm)	(Wa)	396.00	394.00	392.00	
2	Wt. of the fraction retained in IS sieve 2.36mm after the impact test (gm)	(Wb)	312.00	301.00	305.00	
3	Wt. of the fraction passed in IS sieve 2.36mm after the impact test (gm)	(Wc)	84.00	93.00	87.00	
4	Aggregate Impact Value (%)	(Wc/Wa)*100	21.21	23.60	22.19	
5	Average Aggregate impact value	(%)	22.34			Max - 30 %

Remarks : ✓ Satisfactory / Not Satisfactory

Consultant's Representative

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Project	Improvements to Roads and Drains Thirumenahalli And Surrounding Area in Ward no 5.
Client	Bruhat Bengaluru Mahanagara Palike
Consultant	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri.T K SHANKARAPPA (MESPC INFRA PROJECTS PRIVATE LIMITED)

FLAKINESS AND ELONGATION INDICES (IS 2386, PART 1)

Type of Material	WMM	**Proposed Use**	**WMM**
Sample Location	At plant	**Date of Sampling**	**13-03-2019**
		Date of Testing	**13-03-2019**

Size of aggregate		**Flakiness Index**		**Elongation Index**	
Passing through IS sieve, mm	**Retained on IS sieve, mm**	**Total wt. of aggregate retained on sieves (A) gms.**	**Wt. of aggregate passing from Flakiness gauge (B) gms**	**Wt. of aggregate retained on Flakiness gauge (C) gms**	**Wt. of aggregate retained on Elongation gauge after retained on Flakiness gauge(D)gms**
63.0	50.0	0	0	0	0
50.0	40.0	0	0	0	0
40.0	31.5	0	0	0	0
31.5	25.0	0	0	0	0
25.0	20.0	0	0	0	0
20.0	16.0	615	85	530	75
16.0	12.5	1120	115	1005	115
12.5	10.0	770	65	705	55
10.0	6.3	610	50	560	40
Total		**3115**	**315**	**2800**	**285**

Note: Minimum 200 Pcs should be taken on each fraction of test

Flakiness Index(%):	10.11
Elongation Index(%):	10.18
Combined FI+EL (%)	20.29

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